

TX-NR609 7.2-CHANNEL NETWORK A/V RECEIVER

BLACK SILVER





Audyssey































Ouality Home Cinema Is Now Within Your Reach

Targeting the sweet spot where affordability meets superb functionality, the TX-NR609 looks set to be another Onkyo classic. This THX™ Select2 Plus™ Certified A/V receiver handles content from all your favorite disc-based media, as well as networked and audio content from the internet, iPod/iPhone, and PC. Six HDMI™ inputs—including one on the front panel—provide support for 3D video and ultra-high resolution 4K video upscaling via Marvell Qdeo™. HDMI also carries master-quality audio formats from Dolby and DTS, as well as the expanded surround sound of Audyssey DSX™ and Dolby™ Pro Logic™ IIz. Three-stage inverted Darlington circuitry and Onkyo's proprietary WRAT ensure a clean and compelling amplifier performance. And when audio signals are output, the 7.2-channel configuration includes twin subwoofer pre-outs for added bass impact. Meanwhile, a user-friendly on-screen display and GUI make it easy to adjust settings and navigate your content. All this and more makes the TX-NR609 an irresistible choice for the value-seeking home cinema fan.

ADVANCED FEATURES

- THX™ Select2 Plus™ Certified
- HDMI™ Support for 3D, Audio Return Channel, Deep Color™, x.v.Color™, LipSync, Dolby™ TrueHD, DTS-HD Master Audio™, DVD-Audio, Super Audio CD, Multichannel PCM, and CEC
- · Three-Stage Inverted Darlington Circuitry
- HDMI Video Upscaling to 4K with Marvell Qdeo
- Direct Digital Connection of iPod/iPhone via Front-Panel USB Port
- Audyssey DSX[™] and Dolby[™] Pro Logic[™] IIz for Expanded Surround Channels
- · Overlaid Graphical On-Screen Display (OSD) and GUI Navigation via HDMI
- Playback of Audio Files Through Local Network (MP3, WMA, WMA Lossless, FLAC, WAV, Ogg Vorbis, AAC, LPCM)
- Internet Radio and Music Streaming Service Connectivity (vTuner, Last.fm*)
- Certified with Windows[™] 7 and DLNA Version 1.5
- 2 Parallel Subwoofer Pre Outs
- · Analog RGB Video Input (D-sub, 15 pin) for PC
- Illuminated Volume Knob (White)

AMPLIFIER FEATURES

- 160 W/Ch at 6 Ω, I kHz, I%, I Channel Driven,
- WRAT (Wide Range Amplifier Technology)
- · H.C.P.S. (High Current Power Supply) Massive High

- Power Transformer
- · Optimum Gain Volume Circuitry
- PLL (Phase Locked Loop) Jitter-Cleaning Circuit Technology for S/PDIF Audio

PROCESSING FEATURES

- Dolby[™] TrueHD and DTS-HD Master Audio[™] Decoding
- TI Burr-Brown 192 kHz/24-Bit DACs (PCM1690) for All Channels
- · Advanced 32-Bit Processing DSP Chip
- 4 DSP Modes for Gaming: Rock, Sports, Action,
- · Advanced Music Optimizer for Compressed Digital
- Mass Storage Class USB Memory Playback Capability
- Theater-Dimensional Virtual Surround Function
- Direct Mode
- Pure Audio Mode
- Double Bass Function
- · Non-Scaling Configuration
- · A-Form Listening Mode Memory

CONNECTION FEATURES

- 6 HDMI Inputs (I Front/5 Rear) and I Output
- Universal Port for Onkyo Peripheral Devices Such as UP-A1 Dock for iPod/iPhone or UP-DT1 DAB+ Radio Tuner
- HDTV-Capable (720p/1080i) Component Video

- Switching (2 Inputs and 1 Output)
- 5 Composite Video Inputs (I Front/4 Rear) and 2 Outputs
- 4 Digital Audio Inputs (2 Optical and 2 Coaxial)
- 6 Analog Audio Inputs and I Output
- Powered Zone 2 and Zone 2 Line-Out for Distributed Audio Playback in Another Room
- · Color-Coded, Banana Plug-Compatible Speaker Posts (Except Zone 2)
- · Headphone Jack

OTHER FEATURES

- Audyssey $2EQ^{™}$ for Room Acoustic Correction
- Audyssey Dynamic EQ[™] for Loudness Correction
- Audyssey Dynamic Volume[™] to Maintain Optimal Listening Level and Dynamic Range
- Independent Crossover Adjustment for Each Channel (40/50/60/70/80/90/100/120/150/200 Hz)
- A/V Sync Control (Up to 800 ms at 48 kHz)
- Tone Control (Bass/Treble) for Front L/R Channels • Light Dimming (Display: Normal/Dim/Dimmer; Volume Knob LED: On/Off)
- RDS (PS/RT/PTY/TP)
- 40 FM/AM Random Presets
- Firmware Updates via Ethernet and USB
- RIHD (Remote Interactive over HDMI) for System Control
- Preprogrammed RI (Remote Interactive) Remote Control



TX-NR609 7.2-CHANNEL NETWORK A/V RECEIVER

$\mathsf{HDMI}^{\mathsf{\tiny{TM}}}$ Support for 3D Video and Audio Return Channel

The six HDMI inputs on the TX-NR609 let you simultaneously connect high-def sources such as a Blu-ray player, a gaming console, and a cable/satellite tuner. A single output then sends a pristine signal to your connected high-resolution display. The HDMI implementation on this receiver supports both 3D video and an Audio Return Channel, along with numerous high-resolution formats. 3D video brings exciting possibilities to home entertainment, with movie, game, and broadcast content on the increase and 3D-compatible TVs now on the market. Meanwhile, the Audio Return Channel allows audio content received directly by your HDTV's tuner to be sent "upstream" via HDMI to your AV receiver, without the need for a separate S/PDIF audio cable.

Network Capability Delivers Internet Radio and Network Audio Streaming via Ethernet

As one of Onkyo's new breed of receivers that can link directly to the internet or to your home PC via a local network, the TX-NR609 takes streaming audio and internet radio to a whole new level. MP3, WMA, WMA Lossless, FLAC, WAV, Ogg Vorbis, AAC, and LPCM audio files can now be played back through your main system with unprecedented power and fidelity. The TX-NR609 also brings to life a huge array of internet radio channels from Lastfm* and vTuner. As well as being compatible with earlier platforms, the receiver is compatible with Microsoft's Windows* 7 platform, which includes the DLNA 1.5-specified "Play To" media-streaming feature. The TX-NR609's internet connectivity has the added benefit of making firmware updates simpler than ever.

*Availability of services depends on region.

Direct Digital Connection of iPod/iPhone via Front-Panel USB Port

The TX-NR609's front-panel USB port lets you access MP3, WMA, WMA Lossless, FLAC, WAV, Ogg Vorbis, and AAC audio files stored on a USB flash drive or iPod/ iPhone. As the audio signals are transported in digital form, rather than analog, there is much less chance for signal degradation. End result: your music sounds cleaner and more faithful to the original. A further benefit of the USB input is that it lets you use the system's remote controller to play back audio files on the connected device.

THX™ Select2 Plus™ Certified

THX Select2 Plus certification is specified for rooms where the screen-to-seat viewing distance is 3 to 4 meters and the room volume is around 56 cubic meters. To achieve THX Select2 Plus certification, the TX-NR609 had to meet the world's most demanding standards for home cinema audio quality and performance, and play at reference volume levels with minimal distortion.

Marvell Qdeo $^{\text{\tiny M}}$ Video Chip for 4K Upscaling and Processing

The TX-NR609 offers full 4K (3840 \times 2160) upscaling of standard video sources such as 480/p, 720p, and 1080/p. Interlaced-to-progressive conversion and scaling are performed by a high-quality Marvell Qdeo video-processing chip. Qdeo is a versatile video processor that uses algorithms designed to erase video noise and artifacts such as jaggies and feathering. Played back on a compatible wide-screen display, your Blu-ray Discs and DVDs will look more detailed and cinematic than ever.

Audyssey DSX[™] and Dolby[™] Pro Logic[™] IIz Add Expanded Dimensions to Surround Sound

The TX-NR609 handles two advanced surround-sound technologies from Audyssey and Dolby that offer exciting new ways to set up the speakers in your home cinema system. Audyssey DSX can reconfigure the TX-NR609's surround back channels to deliver "front height" channels. These channels carry ambient, non-directional audio that adds a new vertical dimension to your movies and games. Dolby Pro Logic Ilz provides a similar front-height speaker option that likewise works to create a more enveloping home cinema experience.

Three-Stage Inverted Darlington Circuitry

Three-stage inverted Darlington circuitry is a core Onkyo technology that brings greater efficiency to the TX-NR609. It incorporates a low-NFB design to remove distortion and enhance the natural character of audio signals. Sensitive to oscillations, this circuitry requires very advanced control technology in order to be incorporated into the amplifier.

Overlaid Graphical On-Screen Display and GUI Navigation

Changing the TX-NR609's settings is a seamless affair, thanks to the receiver's overlaid graphical On-Screen Display (OSD). Set-up menus appear overlaid on the video image you're watching, so you don't have to switch to a blank screen background. Meanwhile, a new GUI lets you smoothly navigate internet radio and iPod/iPhone contents. The OSD and GUI both operate over HDMI, making excellent use of that versatile interface.

SPECIFICATIONS

Amplifier Section	n
Power Output	
Front L/R	160 W/Ch
	(6 Ω, I kHz, I%, I channel driven, IEC)
Center	160 W
	(6 Ω, I kHz, I%, I channel driven, IEC)
Surround L/R	160 W/Ch
	(6 Ω, I kHz, I%, I channel driven, IEC)
Surround Back L/R	or Front High L/R
	160 W/Ch
	(6 Ω, I kHz, I%, I channel driven, IEC)
Dynamic Power	240 W (3 Ω, Front)
•	210 W (4 Ω. Front)

Dynamic rower	2-10 VV (3 \$2, 11011t)
	210 W (4 Ω, Front)
	120 W (8 Ω, Front)
THD+N (Total Harmonic Distortion + Noise)	
	0.08% (20 Hz–20 kHz, Half power)
Damping Factor	60 (Front, 1 kHz, 8 Ω)
Input Sensitivity and Impedance	
	200 mV/47 kΩ (Line)

·	200 mV/2.2 kΩ (Rec out)	
Maximum RCA Output Level and Impedance		
	2.0 V/2.2 kΩ (Rec out)	
Frequency Response	5 Hz-100 kHz/+1 dB, -3 dB (DSP bypass)	
Tone Control	±10 dB, 50 Hz (Bass)	
	±10 dB, 20 kHz (Treble)	

 $\pm 10 \ dB, 20 \ kHz \ (Treble)$ Signal-to-Noise Ratio 106 dB (Line, IHF-A)
Speaker Impedance $4 \ \Omega - 16 \ \Omega \ \text{or} \ 6 \ \Omega - 16 \ \Omega$ Video Section

Rated RCA Output Level and Impedance

Video I.0 Vp-p/75 Ω (Component Y) 0.7 Vp-p/75 Ω (Component PB/CB, PR/CR)

1.0 Vp–p/75 Ω (Composite) Component Video Frequency Response 5 Hz–100 MHz/0 dB, -3 dB

Input Sensitivity/Output Level and Impedance

Tuner Section	
Tuning Frequency Range	
FM	87.5 MHz-108 MHz
AM	522 kHz-1,611 kHz
	530 kHz-1,710 kHz
FM/AM Preset Memory	40 stations
General	
Power Supply	AC 220-240 V~, 50/60 Hz

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General	
Power Supply	AC 220-240 V~, 50/60 Hz
Power Consumption	610 W
Dimensions (W x H x D	
Weight	11.3 kg
CARTON	

Weight 15.0 kg

- Supplied Accessories

 Indoor FM antenna AM loop antenna Speaker cable labels
- Speaker set-up microphone Instruction manual

Dimensions (W x H x D) 570 x 297 x 423 mm

• Quick set-up guide • Remote controller • AA (R6) batteries × 2



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